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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/893,399      | 06/29/2001  | Masatoshi Arishiro   | 018976-199          | 6008             |

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EXAMINER

HARAN, JOHN T

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1733

DATE MAILED: 01/15/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/893,399

Applicant(s)

ARISHIRO ET AL.

Examiner

John T. Haran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because Figure 1 contains Japanese writing, which should be removed. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the limitation "each tray being adapted to sort and hold". It is unclear how a tray is adapted to sort. It does not appear that the actually tray performs any sorting but rather that it holds sorted sheets. It is suggested to amend the limitation to read - - each tray being adapted to hold - -.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application

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published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Baccini (U.S. Patent 6,109,323).

Baccini discloses a manufacturing apparatus for manufacturing green-tape circuits comprising a plurality of containers/racks (15) wherein each container/rack holds a plurality of supports/trays (16), each of which bears a green-tape foil/ceramic green sheet(11). Each container/rack holds a specific type of green-tape foil. The containers are fed in a pre-set well-determined sequence to the manufacturing apparatus. The apparatus comprises a withdrawal slider means/tray drawer device (24) which draws the supports from the container, a removal station/conveyor device (35) for picking up a single green-tape foil from the drawn support and conveys it to the welding unit/laminator (44) for laminating a plurality of stacked green-tape foils. Baccini anticipates claim 1.

It is noted that the claim language indicates that the racks contain a plurality of trays, each tray with a different type of ceramic green sheet and that the containers of Baccini contain a plurality of supports each having the same type of green-tape foil. However, the containers of Baccini are capable of holding a different type of green-tape foil in each support and meets the limitations of the apparatus claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baccini (U.S. Patent 6,109,323).

Baccini teaches that the withdrawal slider means (24) contains a vertical positioner means (25) which positions the withdrawal slider means with the support/tray (16) to be removed (Column 8, line 66 to Column 9, line 4). Baccini is silent towards vertically moving the container/rack (15) so that the support/tray to be removed is at the height of the withdrawal slider means. One skilled in the art would have readily appreciated that either the withdrawal slider means needs to be movable to reach each support or the container must be movable to position each support adjacent the withdrawal slider means. The two options are alternative expedients and are obvious one over the other in the absence of unexpected results. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a drive for driving the container to be raised and lowered in a vertical direction to position the support at a predetermined height for removal by the withdrawal slider means in the apparatus of Baccini.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baccini (U.S. Patent 6,109,323) as applied to claims 1 and 2 above, and further in view of Masayuki (JP 07010277).

Baccini et al is silent towards stacking more than one green-tape foil on a support. One skilled in the art would have readily appreciated it is well known and

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conventional to stack ceramic green sheets and remove them one by one from the top using a chucking device, as shown for example in Masayuki (See Figure 2).

Furthermore one skilled in the art would have readily recognized that stacking would eliminate the need for refilling the containers as often. It would have been obvious to one of ordinary skill in the art at the time the invention was made to stack sheets in the trays of Baccini and remove the topmost sheet with a chucking device.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(703) 305-0052**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

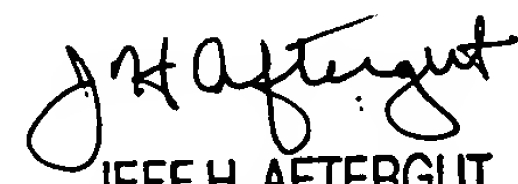
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0661.

  
John T. Haran

January 8, 2003

  
JEFF H. AFTERGUT  
PRIMARY EXAMINER  
GROUP 1300